

NOTES AND NEWS.

DR. G. J. PEIRCE, who has been reading in the botanical libraries at Harvard during the past year, takes the place of Prof. Mottier in Indiana University while the latter goes abroad.

MR. W. C. McDONALD of Montreal has presented thirty-five acres of ground, conveniently situated and suitable, for the use of the botanic garden in connection with McGill University.

DANIEL CADY EATON, professor of botany in Yale University, died at his residence in New Haven, Conn., on June 29th, after a long illness. A biographical sketch is printed elsewhere in this number.

MR. B. M. DUGGAR AND MR. W. H. RUSH have received the degree of Master of Arts from Harvard University. Mr. Duggar is to join the staff of the Agricultural Experiment Station, Champaign, Ill., and work on entomogenous fungi; Mr. Rush goes to Washington University, St. Louis, Mo., as general instructor in botany.

THE CELEBRATED Japanese lac with which the finest lacquering is done is produced from the latex of species of *Rhus*. M. G. Bertrand has pointed out (*Compt. Rend.* 118: 1215. 1894) that the hardening and blackening of this material, upon which its use as lac depends, is not due to a sudden oxidation alone, but also to the operation of a ferment, laccase.

DANGEARD thinks that he has discovered the sexual process in Ascomycetes. In *Peziza vesiculosa* he has seen two thick filaments lying near each other, and at the tip of each a terminal cell with a nucleus is cut off. These cells copulate and their nuclei fuse. Then the "egg" thus fertilized sends out a prolongation which becomes an ascus into which the nucleus wanders and divides to form the spore nuclei. Cf. *Compt. Rend.* 118: 1065. 1894.

HENRY HOLT & Co. announce the publication in December of the second volume of Beal's "Grasses of North America." This volume is to contain descriptions of about 1,000 species and varieties of grasses, native and introduced, with carefully drawn illustrations of at least one species of each group, together with a chapter on the geographical distribution of the plants of this family and a list of some of the most important contributions to their study.

THE DOCTOR'S DEGREE was conferred upon three candidates in botany at the recent Harvard commencement. The recipients were E. A. Burt, thesis: The development of the receptaculum in the Phalloideæ; B. M. Davis, thesis: Considerations on the carposporic type of reproduction; H. M. Richards, thesis: On some points regarding the morphology and parasitism of certain Uredineæ. Dr. Burt goes to Middlebury College, Middlebury, Vt., as Burr professor of natural history; Dr. Davis to Chicago University, as instructor in cryptogamic botany. Dr. Richards has been appointed to a Parker travelling fellowship, and is to study abroad, at Leipzig.

AN INTERESTING USTILAGO on *Zizania latifolia* was described by P. Hennings in *Hedwigia* (34: 10). It is sold in the markets of Tonkin as a vegetable. In the May number of the *Tokyo Botanical Magazine* K. Miyabe gives an account of it as it appears in Japan, where it is gathered and sold, but not for eating. Japanese women color the eyebrows and hair with the spores mixed with oil. The spores are more largely used in the lacquer industry to produce rusty colored wares by mixing with lac. The smut is also interesting for its development. It starts in the terminal meristem when the shoot is young. The culm remains short, but the spore mass enlarges to four or five inches in length and three fourths of an inch in thickness. The spores are massed into peculiar small granules in cavities in the tissues of the host.

ERIKSSON'S studies on the forms of rusts on cereals deserve special attention. In collaboration with Henning he has already¹ called attention to the extensive development of forms among the different species. These forms differ not only in slight morphological characters, such as the structure or dimensions of the spores, but also in the fact that infection with uredospores from a certain species of grass will be efficient in producing disease in the same host species, and not as a rule in other species of grasses. In a later paper² he shows that in five species of *Puccinia*, growing on thirty-five species of grasses, twenty-two forms can be separated with greater or less certainty. The correctness of such distinctions has been sustained by the negative results of experiments in which he sought, by using the aecideal form as a bridge, to transfer the forms to other hosts than those to which they are specially adapted. It will be readily seen that these experiments open up questions of great physiological and taxonomic significance.

ON ACCOUNT of serious financial difficulties and a distrust of the progressive and enlightened educational policy of President John, the trustees of DePauw University, at Greencastle, Indiana, have forced the resignation of the president and set about a return to the old paths. The department of biology having been founded by Dr. John was among the first to suffer. It was summarily abolished, the announcement being made, without previous warning, only the day before commencement. From a professor of zoology and one of botany at the beginning of the last college year, the instructional force is reduced to a single tutor, who is expected to give instruction in the elements of both sciences. Dr. Lucien M. Underwood, whose ability and success as professor of botany have won him the high esteem of both faculty and students, has sailed for Europe and will return in the autumn with his family, who have spent the past year in Germany. He will take up his residence in Syracuse, N. Y.

¹ Zeits. f. Pfl.-Krankh. 4: 71. 1894.

² Ueber die Specialisirung des Parasitismus bei den Getreiderostpilzen. Ber. d. deut. bot. Gesells. 9: 291. 27 D 1894.